

Application No. 10/760,650

**REMARKS**

The Applicant and the undersigned thank Examiner Aurora for her careful review of this application. Consideration of the present application is respectfully requested in light of the above amendments to the claims and in view of the following remarks. Claims 1-15 have been rejected and Claim 15 has been objected to. Applicant has amended Claims 1, 4, 5, and 10. Applicant has canceled Claim 9. Applicant has added Claims 16-24. Upon entry of the amendments, Claims 1-8 and 16-24 are pending in the subject application with none having been allowed. The independent claims for this application are Claims 1 and 16.

**I. Objection to Dependent Claim 15**

The Examiner objected to dependent Claim 15 under 37 C.F.R. § 1.126 for failure to preserve original numbering of the claims throughout the prosecution term. More specifically, Claim 15 was objected to because Applicant's original claim set included two claims numbered Claim 14. Applicant accepts and thanks Examiner Aurora for the Examiner's amendment renumbering the second Claim 14 as Claim 15 and Applicant respectfully requests that the objection of Claim 15 be withdrawn.

**II. Claim Rejections Under 35 U.S.C. § 102(b)**

The Examiner rejected Claims 1-6 under 35 U.S.C. § 102(b) as being anticipated by Great Britain Patent Specification Publication No. 1,602,065 to Bailey ("*Bailey*"). The Applicant respectfully offers the following remarks to traverse these pending rejections.

The rejection of independent Claim 1 is respectfully traversed in view of the submitted amendments. It is respectfully submitted that *Bailey* fails to teach or suggest all of the recitations enumerated in Claim 1, as amended. Independent Claim 1 was amended to include the limitations recited in original Claim 9. The Examiner rejected Claim 9 under 35 U.S.C. § 103(a) as being unpatentable over *Bailey* in view of U.S. Patent No. 6,720,764 to Relton ("*Relton*"). In the arguments, the Examiner failed to set forth how either *Bailey* or *Relton* taught or suggested the limitations that were set forth in dependent Claim 9.

The Examiner admits that "[a]s to claims 7-10, *Bailey* fails to show that the pipe segment count is fed into a computer system." *Office Action*, at p. 3. The Examiner goes on to state that, "*Relton* discloses feeding a pipe segment count into a computer system... . Therefore it would

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have been obvious to one of ordinary skill in the art at the time of the invention was made to have modified the device of *Bailey* with the teachings of *Relton* such that including a computer and feeding a pipe segment count into it would process the information faster and accurately." *Office Action*, at pp. 3-4. However, dependent Claim 9, as originally set forth, was limited to a process "wherein the magnetic field detection device is embedded into or molded into a wiper rubber." Dependent Claim 9 did not include a limitation of feeding information into a computer system as relied upon in the arguments by the Examiner.

Furthermore, neither *Relton* nor *Bailey* teach or suggest embedding the magnetic field detection device into a wiper rubber. *Relton* teaches a housing to secure the source piece, sensor piece, and motor. *Relton*, col. 11:1-4. The housing wraps around the outside surface of the non-magnetic cylindrical spool and is connected to the cylindrical spool by Velcro or hooks and receivers. *Relton*, col. 11:7-11. As shown in Fig. 3 of *Relton*, the tubing string 95 and tool joint 90 pass through the cylindrical spool 110. *Relton*, Fig. 3. Thus, the housing of *Relton* does not come into contact with the tubing string.

On the other hand, those of ordinary skill in the art recognize that the wiper rubber of amended Claim 1 is used to remove mud and debris from the pipe as it is being pulled from or run into a well. Thus, the wiper rubber in which the magnetic field detection device is embedded, is in direct contact with the pipe segments. Therefore, the housing of *Relton* is not analogous to wiper rubber and *Relton* does not teach or suggest embedding the magnetic field detection device into a wiper rubber. Thus, Applicant has shown that *Bailey*, in combination with *Relton*, fails to teach or suggest all of the recitations enumerated in amended Claim 1. Accordingly, reconsideration and withdrawal of the rejection of amended Claim 1 is respectfully requested.

### **III. The Inventions of Dependent Claims 2-8, and 10-15 are Distinguishable from the Cited Art**

The Applicant respectfully submits that the above-identified dependent claims are allowable because the independent claim from which they depend, amended Claim 1, is patentable over the cited references. The Applicant also respectfully traverses the Examiner's assertions about these claims and submit that the recitations of these dependent claims are of patentable significance. While Applicant has amended dependent Claims 4, 5, and 10, these

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amendments were made only to correct and ensure proper antecedent basis and consistent terminology with amended Claim 1. The Applicant respectfully requests that the Examiner reconsider and withdraw the pending rejection of Claims 2-8, and 10-15.

#### **IV. Addition of New Claims 16-24**

Applicant has added new independent Claim 16, and dependent Claims 17-24. Independent Claim 16 is equivalent to original Claim 11, rewritten in independent form to include limitations of original independent Claim 1. The Examiner rejected dependent Claim 11 under 35 U.S.C. § 103(a) as being unpatentable over *Bailey* in view of *Relton*. Applicant respectfully traverses this rejection in view of the combination of Claim 11 and independent Claim 1 in new independent Claim 16.

The Examiner admitted that *Bailey* fails to disclose a processing module to filter the signal from the magnetic flux measuring device as set forth in dependent Claim 11. *Office Action*, p. 4. However, the Examiner takes the position that "*Relton* discloses a processing module (50, fig. 3) to filter the signal from the magnetic flux measuring device." *Office Action*, p. 4. Fig. 3 of *Relton* presents a view of the tool joint locator embodiment that shows the tubing string 95 and tool joint 90 inside of the cylindrical spool 110. *Relton*, Fig. 3 and col. 7:25-27. The *Relton* embodiment also includes an evaluation board 50, connected to one or more sensors, that converts information from the sensors 30 into a digital form and passes the digital information to a computer. *Relton*, col. 7:45-51. The same evaluation board 50 in the embodiment of Fig. 3 is also described in the embodiment of Fig. 1. Therein, *Relton* provides that the evaluation board is an analog to digital converter. *Relton*, col. 6:31-35.

An analog to digital converter converts a voltage signal to a discrete digital value. The analog to digital converter does not filter out noise from the signal received from the sensors. On the other hand, the processing module of new Claim 16 filters the noise in the signal from the magnetic field measuring device. Furthermore, *Relton* does not teach or suggest appending a filtering device between the sensors 30 and the evaluation board 50. Thus, Applicant has shown that *Bailey* in view of *Relton* fails to teach or suggest all of the recitations of new Claim 16, which combines the limitations of original Claims 1 and 11. Accordingly, Applicant and the undersigned respectfully request that independent Claim 16 and the claims that depend from it be

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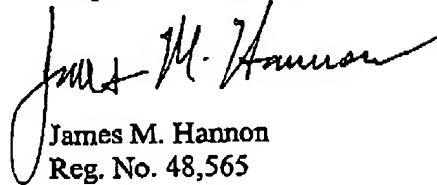
passed to allowance. The new claims find clear support in the specification and do not contain new matter.

### CONCLUSION

The foregoing is submitted as a full and complete response to the Official Action mailed on September 22, 2005. The Applicant has amended the claims and has submitted remarks to traverse the rejections of pending Claims 1-8 and 10-24. Applicant has shown above that Claims 1-8 and 10-24 are allowable over the art cited by the Examiner and respectfully request that the Examiner withdraw all pending rejections and objections to Claims 1-8 and 10-24.

If the Examiner believes that there are any issues that can be resolved by a telephone conference, or that there are any informalities that can be corrected by an Examiner's amendment, a telephone call to the undersigned at (404) 572-4691 to discuss same is respectfully requested.

Respectfully submitted,



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